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Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1. (Original) A process for preparing a LH-RH derivative which comprises the steps of:

subjecting contacting a solution containing the LH-RH derivative to a step for treatment with a methacrylic synthetic adsorption resin; and a step for treatment

contacting the solution containing the LH-RH derivative with an aromatic synthetic adsorption resin.

2. (Currently Amended) The process according to claim 1, wherein the LH-RH derivative is a peptide represented by the formula

 $5\hbox{-}oxo\hbox{-}Pro\hbox{-}His\hbox{-}Trp\hbox{-}Ser\hbox{-}Tyr\hbox{-}Y\hbox{-}Leu\hbox{-}Arg\hbox{-}Pro\hbox{-}Z$ 

wherein Y indicates a residue selected from <u>D-Leu, D-Ala, D-Trp, D-Ser(tBu), D-2Nal</u> and <u>D-His(ImBzl)</u>DLeu, DAla, DTrp, DSer(tBu), D2Nal and DHis(ImBzl), and Z indicates NH-C<sub>2</sub>H<sub>5</sub> or Gly-NH<sub>2</sub>, respectively, or a salt thereof.

3. (Currently Amended) The process according to claim 1, wherein the LH-RH derivative is a peptide represented by the formula

5-oxo-Pro-His-Trp-Ser-Tyr-<u>D-Leu-DLeu-Leu-Arg-Pro-NH-C</u><sub>2</sub>H<sub>5</sub> or its acetate.

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4. (Original) The process according to claim 1, wherein said process comprises using a methacrylic synthetic adsorption resin having a repeating unit represented by the formula

$$\begin{array}{c|cccc} CH_3 & CH_3 \\ -CH_2 & -CH_2 & -CH_2 \\ \hline & CO & COOCH_3 \\ O & & & & \\ (CH_2)_2 & & & \\ CO & & & & \\ -CH_2 - C & -CH_2 - C \\ CH_3 & & & & \\ \end{array}$$

- 5. (Original) The process according to claim 1, wherein the aromatic synthetic adsorption resin is a styrene-divinylbenzene synthetic adsorption resin.
- 6. (Original) The process according to claim 5, wherein an average particle size of the styrene-divinylbenzene, synthetic adsorption resin is about 60 pm to about 150 pm.
- 7. (Original) The process according to claim 1, wherein said process comprises subjecting a solution containing the LH-RH derivative to the step for treatment with a methacrylic synthetic adsorption resin below about 10°C.
- 8. (Original) The process according to claim 1, wherein said process comprises subjecting a solution containing the LH-RH derivative to the step for treatment with an aromatic synthetic adsorption resin at about 10°C to about 20°C.
- 9. (Original) The process according to claim 1, wherein said process comprises subjecting a solution containing the LH-RH derivative to the step for treatment with a methacrylic, synthetic adsorption resin, followed by subjecting to the step for treatment with an aromatic, synthetic adsorption resin.

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10. (<u>Currently Amended</u>) The process according to claim 1, said process comprises passing a solution containing the LH-RH derivative through a resin in the step for treatment in the step of contacting the LH-RH derivative with a the methacrylic synthetic adsorption resin; and then eluting the LH-RH derivative, which is adsorbed on the resin, with an aqueous solution of acetic acid.

- 11. (Original) The process according to claim 10, wherein the concentration of an aqueous solution of acetic acid is about 0.01 M to about 0.50 M.
- 12. (Currently Amended) The process according to claim 1, wherein said process comprises passing a solution containing the LH-RH derivative through a resin in the step for of contacting the LH-RH derivative treatment with a methacrylic, synthetic adsorption resin, followed by washing with an aqueous solution of ethanol, and then by eluting the LH-RH derivative that is adsorbed on the resin.
- 13. (Original) The process according to claim 1, wherein a solution containing the LH-RH derivative is that obtained by subjecting the LH-RH derivative protected with protective group(s) to a deprotection reaction followed by a neutralization reaction below about 10°C.
- 14. (Original) The process according to claim 1, wherein a solution containing the LH-RH derivative is that obtained by subjecting the LH-RH derivative protected with protective group(s) to a deprotection reaction and then a neutralization reaction below about 10°C, followed by subjecting the resulting mixture to extraction of the LH-RH derivative and then concentration of the extract below 25°C.
- 15. (Currently Amended) The process according to claim 13 or 14, wherein the LH-RH derivative protected with protective group(s) is represented by the formula 5-oxo-Pro-His-Trp-Ser-Tyr-Y-Leu-Arg(X)-Pro-Z

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wherein X indicates a protective group, Y indicates a residue selected from <u>D-Leu, D-Ala, D-Trp, D-Ser(tBu), D-2Nal and D-His(ImBzl)</u> <u>DLeu, DAla, DTrp, DSer(tBu), D2Nal and DHis(ImBzl)</u> and Z indicates NH-C<sub>2</sub>H<sub>5</sub> or Gly-NH<sub>2</sub>, respectively.

- 16. (Currently Amended) Purified leuprorelin or a salt thereof, wherein the content of total related substances a sum of all impurities is about 1% or less.
- 17. (Original) Purified leuprorelin or a salt thereof, wherein the content of 5-oxo-Pro-D-His-Trp-Ser-Tyr-D-Leu-Leu-Arg-Pro-NH-CH<sub>2</sub>-CH<sub>3</sub> or a salt thereof is about 0.3% or less.
- 18. (Currently Amended) The process according to claim 14, wherein the LH-RH derivative protected with protective group(s) is represented by the formula 5-oxo-Pro-His-Trp-Ser-Tyr-Y-Leu-Arg(X)-Pro-Z wherein X indicates a protective group, Y indicates a residue selected from <u>D-Leu, D-Ala, D-Trp, D-Ser(tBu), D-2Nal and D-His(ImBzl) DLeu, DAla, DTrp, DSer(tBu), D2Nal and DHis (ImBzl) and Z indicates NH-C<sub>2</sub>H<sub>5</sub> or Gly-NH<sub>2</sub>, respectively.</u>
- 19. (New) The purified leoprorelin or a salt thereof according to claim 16, wherein the impurities are racemic isomers of the LH-RH derivatives and/or highly polar related substances.